Serial No.: 10/749,833

Filed: December 30, 2003

Page : 3 of 10

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A drop ejector, comprising:

a flow path in which fluid is pressurized to eject drops from a nozzle opening formed in a substantially planar substrate and lying in a plane defined by a surface of the substrate, and a channel formed in the substrate proximate the nozzle opening for drawing fluid into the space defined by the channel, a portion of the channel being spaced from the nozzle opening by a distance of about 20% of a nozzle width or more below the plane defined by the surface of the substrate.

- 2. (Original) The drop ejector of claim 1 wherein the nozzle opening is surrounded by the channel.
- 3. (Original) The drop ejector of claim 2 wherein the channel is in the shape of a circle.
- 4. (Cancelled)
- 5. (Original) The drop ejector of claim 1 wherein the channel has a width that is about twice the nozzle opening width or less.
- 6. (Original) The drop ejector of claim 1 wherein the channel has a width of about 100 microns or less.
- 7. (Currently amended) The drop ejector of claim 1 wherein a depth of the channel is from about 2 microns to about 50 microns.

Serial No.: 10/749,833

Filed: December 30, 2003

Page : 4 of 10

8. (Original) The drop ejector of claim 1 wherein the substrate is a silicon material.

- 9. (Original) The drop ejector of claim 1 wherein the planar substrate includes a plurality of nozzle openings and channels proximate the nozzle openings.
- 10. (Currently amended) The drop ejector of claim 1 wherein the nozzle opening width is about 200 microns or less.
- 11. (Original) The drop ejector of claim 1 including a piezoelectric actuator.
- 12. (Currently amended) A method of fluid ejection, comprising: providing a drop ejector including a flow path in which fluid is pressurized for ejection through a

ejecting a drop through a nozzle opening formed in a substrate and lying in a plane defined by a surface of the substrate; , and a channel formed

positioning a channel in the substrate proximate the nozzle opening for drawing fluid into the space defined by the channel, a portion of the channel being spaced from the nozzle opening by a distance of about 20 % of the nozzle width or more below the plane defined by the surface of the substrate; and

providing a fluid that is wicked by capillary forces drawn into the space defined by said channel., and

ejecting said fluid through said nozzle opening by pressurizing said fluid in said flow path.

13. (Original) The method of claim 12 wherein the fluid has a surface tension of about 20-50 dynes/cm.

Serial No.: 10/749,833

Filed: December 30, 2003

Page : 5 of 10

14. (Original) The method of claim 12 wherein the fluid has a viscosity of about 1 to 40 centipoise.

- 15. (New) The drop ejector of claim 1 wherein the channel is spaced from the nozzle opening by a distance of about 20% of a nozzle width or more.
- 16. (New) The drop ejector of claim 1 further comprising at least one radial channel.
- 17. (New) The drop ejector of claim 16 further comprising a vacuum source in communication with the radial channel.
- 18. (New) The drop ejector of claim 16 further comprising a wicking material in communication with the radial channel.
- 19. (New) The drop ejector of claim 1 wherein fluid is drawn into the space defined by the channel during jetting.
- 20. (New) The method of claim 12 wherein the channel is spaced from the nozzle opening by a distance of about 20% of a nozzle width or more.
- 21. (New) The method of claim 12 further comprising at least one radial channel.
- 22. (New) The method of claim 21 further comprising providing a vacuum source in communication the radial channel.
- 23. (New) The method of claim 21 further comprising providing a wicking material in communication with the radial channel.

Serial No.: 10/749,833

Filed: December 30, 2003

Page : 6 of 10

24. (New) The method of claim 12 wherein the fluid is drawn into the channel by capillary forces.

- 25. (New) The method of claim 12 wherein the fluid is drawn into the channel by gravity.
- 26. (New) The method of claim 12 wherein fluid is drawn into the space defined by the channel during jetting.